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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,092

05/31/2006

Koichiro Nakazawa

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EXAMINER

SHAH, MANISH S

ART UNIT

PAPER NUMBER

2853

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,092	Applicant(s) NAKAZAWA ET AL.	
	Examiner Manish S. Shah	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/19/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 & 3-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Horii et al. (# US 2005/0041081).

Horii et al. discloses:

- An ink jet printing apparatus ([0184]) for printing by ejecting an ink containing a colorant from a print head, comprising: at least one ink absorber ([0046]; [0184]-[0185]) containing a coagulation inhibitor and absorbing the ink discharged from the print head, the coagulation inhibitor inhibiting a coagulation of the colorant contained in the ink ([0045]-[0048]; [0105]-[0112]).

- An ink jet printing apparatus further comprising: a preliminary ejection means for preliminary-ejecting the ink from the print head; and a preliminary ejection receiver for accommodating the ink preliminary-ejected by the preliminary ejection means; wherein the at least one ink absorber absorbs the ink accommodated in the preliminary ejection receiver ([0045]-[0048]; [0094]; [0105]-[0112]).

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- An ink jet printing apparatus further comprising: an ink discharging means for discharging the ink from the print head by other than an ejection; and an ink discharging path for transporting the ink discharged by the ink discharging means; wherein the at least one ink absorber absorbs the ink transported through the ink discharging path ([0022]-[0044]; [0105]-[0112]).

- An ink jet printing apparatus further comprising: a reaction liquid head for ejecting a reaction liquid, the reaction liquid accelerating a coagulation of colorant contained in the ink; a reaction liquid discharging means for discharging the reaction liquid from the reaction liquid head; and a reaction liquid discharging path for transporting the reaction liquid discharged by the reaction liquid discharging means; wherein the at least one ink absorber absorbs the ink transported through the ink discharging path and the reaction liquid transported through the reaction liquid discharging path ([0105]-[0112]).

- An ink jet printing apparatus further comprising: a reaction liquid head for ejecting a reaction liquid, the reaction liquid accelerating a coagulation of colorant contained in the ink ([0022]-[0040]; [0045]-[0048]).

- An ink jet printing apparatus further comprising: a supply means for supplying the coagulation inhibitor to the at least one ink absorber ([0094]), wherein said supply means comprises a coagulation inhibiting liquid head for ejecting the coagulation inhibitor ([0094]; [0184]-[0185]; [0194]).

- An ink jet printing apparatus for printing by ejecting an ink containing a colorant from a print head, comprising: an ink absorber for absorbing the ink discharged from the

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print head; and an application means for applying a coagulation inhibitor to the ink absorber, the coagulation inhibitor inhibiting a coagulation of the colorant contained in the ink ([0045]-[0048]; [0094]; [0105][0112]; [0184]-[0185]).

- A method of manufacturing an ink absorber comprising the steps of: immersing the ink absorber in a liquid containing the coagulation inhibitor; and drying the ink absorber immersed with the liquid ([0194]-[0218]; see Examples).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida (# US 2003/0030692) in view of Horri et al. (# US 2005/0041081).

Uchida discloses an inkjet printing apparatus for printing by ejecting an ink containing a colorant from a print head (element: M1000, figure: 1), comprising: at least one ink absorber (element: M2006; figure: 1). They also discloses that the ink jet printing apparatus further comprising a platen (element: M2001; M2001a; M2001b; figure: 1-4) supporting a print medium (element: P) from below in an area including a print area where the print head ejects (element: M1000; figure: 1-2) the ink onto the print medium; wherein the at least one ink absorber is installed in the platen to absorb

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the ink ejected outside the print medium when a printing operation is performed on edge portions of the print medium (element: M2006; figure: 1-4).

Uchida differs from the claim of the present invention is that the ink absorber containing a coagulation inhibitor and the coagulation inhibitor inhibiting a coagulation of the colorant contained in ink.

Horri et al. teaches that to prevent the coagulation between the two liquid, the absorber containing a coagulation inhibitor and the coagulation inhibitor inhibiting a coagulation of the colorant contained in ink ([0046]-[0048]; [0105]-[0112]; [0184]-[0185]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the inkjet printing apparatus of Uchida by the aforementioned teaching of Horri et al. in order to prevent the coagulation between the two liquid, which gives high quality inkjet recording apparatus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Manish S. Shah/
Primary Examiner
Art Unit 2853

/MSS/